

Training for Road Construction Operations in a Desert Environment

By 1LT Kathryn Werback

In October 2007, the Soldiers of the 526th Engineer Company (Horizontal) “Bulldogs”, 92nd Engineer Battalion out of Fort Stewart, Georgia redeployed from Balad, Iraq. After six months of reintegration and regeneration training, the Bulldogs began searching for opportunities to keep their construction skills sharp. The opportunity for such training arose in the form of a road construction mission in support of Joint Task Force-North (JTF-N) and the Department of Homeland Security (DHS). The company eagerly accepted the mission to construct two miles of all-weather patrol road for the United States Border Patrol (USBP) Yuma Sector, in the hope that such a mission deployed to a CONUS location would benefit the unit by developing Soldier construction skills in addition to command and control effectiveness. This mission would provide the company with an outstanding opportunity to train on critical METL-related road construction tasks in a desert environment and conditions similar to those found in many areas where Soldiers could be deployed. Additionally, the project would help improve the tactical infrastructure for the Border Patrol, increasing mobility and improving their ability to patrol the sector. According to the USBP, the impact of similar construction projects is quite striking - in an area that experienced 138,000 illegal border crossers in 2005, or almost 400 illegal border crossers a day, the tall fences and durable roads built by units like the 526th have reduced those numbers to 8,363 in 2008, or 23 a day.

In April and May 2008, the Bulldogs began their mission preparation by conducting six weeks of equipment operator training at Fort Stewart. All Soldiers received training on engineer equipment including graders, scrapers, rollers, cranes, water distributors and hydraulic excavators. The company also conducted leader professional development on road construction, grade stakes and laser levels under the guidance of the battalion’s survey team in preparation for the mission. A company field exercise in August reinforced this training through execution of platoon operations under company command and control to repair Fort Stewart Range Control roads.

After months of planning and preparation in conjunction with JTF-N, mission logisticians rented engineer equipment and contracted for 18,300 cubic yards of aggregate, 8,000 gallons of fuel and 2.5 million gallons of water. In October 2008, the company deployed to Yuma, Arizona to execute the project along the Mexican border. With the one million dollar project finally underway, all of the effort, planning, and coordination that went into organizing the event were evident. Major Allison Day of JTF-N regarded the smooth operations as a result of intensive preparation from one of the most competent units that has worked with JTF-N.

For five weeks, the Bulldogs supported the USBP by constructing three and a half miles of road near San Luis, Arizona in the Sonoran Desert along the Mexican border. In the middle of North America’s hottest desert, tarantulas, scorpions and rattle snakes were daily visitors. Out in the sandy plains, equipment operators learned to handle the harsh environment by blowing out air filters during their daily vehicle inspections. A D7 dozer was always on standby, primarily to drag or push stuck vehicles out of the deep sand. These Soldiers were training with an eye to the future: deployment to Afghanistan or Iraq.

Daily operations were regulated and intense. The company was divided into day and night shifts. Night shift prepared the ground for the following day by thoroughly wetting down the roads and finishing touch up work for the day crew. When the aggregate trucks arrived at 0700 every morning, the day shift was already on site, inspecting equipment, continuing road watering operations and briefing teams on their daily mission. Leaders assigned tasks to teams including initial compaction, initial grade, final grade, and final road approval working in conjunction with civilian and military surveyors. Teams used various combinations of engineer equipment, selecting graders, scrapers, rollers, water distributors, bucket loaders, and dozers to accomplish their daily missions.

The project provided excellent training opportunities at all levels. The company command post provided command and control and coordinated logistics for the project. Platoon leadership exercised project management activities and provided quality assurance for their squads. Squad leaders obtained exceptional hands-on construction and leadership experience that only comes from direct involvement in construction operations. Sergeant Fox, a squad leader in second platoon, found that the mission was a great training opportunity, especially for all of the young Soldiers to operate equipment as well as a great opportunity for the junior NCOs to have the chance to get out and train and lead their Soldiers. Finally, the company's equipment operators benefited greatly from over 11,000 man hours on the project. The most junior Soldier in the company, PV2 Lewis, was especially impressed with the project and his involvement in supporting the USBP in the campaign against terrorism, stating, "This is a tremendous opportunity to acquire technical knowledge and experience."

The Yuma Sector USBP strongly influenced the outcome of the mission by their continuous support. At all times, an agent provided security overwatch for the company. During times when no personnel were on site, USBP agents closely guarded all of the engineer equipment; a challenge with 118 miles in their sector. The USBP also provided vital communications equipment and a command and control facility to the company for use throughout the operation. The partnership between the Yuma Sector USBP and JTF-N ensured safe and efficient construction operations throughout the mission, and set the Bulldogs up for success. The company commander of the 526th EN CO, CPT Dan Herlihy, was very pleased with the level of USBP involvement. "We are extremely impressed with the level of support and the spirit of cooperation offered by the USBP throughout the mission. Both the USBP and JTF-N are highly professional organizations, and it was a pleasure to work with them to help secure our nation from terrorist threats here at home."

After four weeks of intensive equipment operations, the Bulldogs successfully completed their mission while training all personnel to operate equipment in the unforgiving desert terrain. The Bulldogs' efforts resulted in the construction of not only the planned two miles of border patrol road, but an additional half mile of new road and improvements along one mile of existing road. The three and one half miles of newly constructed all-weather patrol road now provide excellent mobility for Border Patrol agents in an area that, just a short time ago, was one of the Southwest's busiest corridors for illegal drug trafficking and criminal smuggling operations. Of equal importance, the Bulldogs completed the mission without a single accident or injury. To recognize this accomplishment, the company received the JTF-N Unit Safety Excellence Award, which

has only been presented 32 times throughout hundreds of missions over the past 19 years. CPT Herlihy remarked, "This mission has been a great opportunity for the Bulldogs. It has allowed us to conduct outstanding training in a desert environment on many of our key wartime tasks. The experience gained here has certainly set the company up for success on future missions. I would highly recommend JTF-N projects to any horizontal Engineer Company seeking sustainment or pre-deployment construction training."



The 526th Engineer Company at project completion.
Photo by CPT Dan Herlihy (1)



A section of U.S. Border Patrol road completed by the 526th Engineer Company near Yuma, Arizona.
Photo by 1LT Kathryn Werback (2)



Grader operations bringing the road to the correct grade.
Photo by 1LT Kathryn Werback (3)



Surveyors support the construction by emplacing grade stakes to check the road elevation.
Photo by CPT Dan Herlihy (4)



Night crew operations to water and compact the road.
Photo by CPT Dan Herlihy (5)



Filling a water distributor.
Photo by 1LT Kathryn Werback (6)



Plaque left on the border fence by the Bulldogs.
Photo by 1LT Kathryn Werback (7)